

b.) AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-8. (cancelled)

9. (currently amended) A vaccine composition for inducing an immune response in a ruminant, said vaccine composition comprising recombinant MSP1a ~~surface protein antigen~~ in combination with an immunogen derived from *A. marginale*, wherein said vaccine composition further comprises a pharmaceutically acceptable carrier or diluent.

10. (previously presented) The vaccine according to claim 9, wherein said immunogen is tick cell culture derived *A. marginale*.

11. (previously presented) The vaccine according to claim 10, wherein said tick cell culture comprises *Ixodes scapularis* tick cell line IDE8.

12. (currently amended) The vaccine according to claim 9, wherein said recombinant MSP1a ~~surface protein antigen~~ is ~~of~~ from the Oklahoma isolate of *A. marginale*.

13. (previously presented) The vaccine according to claim 12, wherein said immunogen is

derived from the Oklahoma isolate of *A. marginale*.

14. (currently amended) A method for inducing a protective immune response in a ruminant against *A. marginale* comprising administering to the ruminant an effective dose of the vaccine composition of claim [[1]] 9.

15. (currently amended) The method according to claim 14, wherein said dose comprises approximately 100 µg of said ~~antigen~~ recombinant MSP1a.

16. (cancelled)

17. (currently amended) The method according to claim 14, wherein said immunogen of said vaccine composition is tick cell culture derived *A. marginale*.

18. (previously presented) The method according to claim 17, wherein said tick cell culture comprises *Ixodes scapularis* tick cell line IDE8.

19. (currently amended) The method according to claim 14, wherein said recombinant MSP1a ~~surface protein antigen~~ is of said vaccine composition is from the Oklahoma isolate of *A. marginale*.

20. (currently amended) The method according to claim 19, wherein said immunogen of said

vaccine composition is derived from the Oklahoma isolate of *A. marginale*.

21. (new) The method according to claim 17, wherein said dose comprises approximately  $2 \times 10^{10}$  of said tick cell culture derived *A. marginale*.

22. (new) The vaccine composition according to claim 9, wherein said recombinant MSP1a is associated to *E. coli* membrane fractions.